

In the Claims

1. (Previously presented) A control system for a firearm laser sight mounted on a firearm, comprising:

a laser circuit comprising a laser light source for generating a sighting beam substantially parallel to the barrel of a firearm, and circuitry activating said laser light source,

a motion detector functionally coupled to said laser circuit for electrically detecting motion vibration indicative of handling of said firearm prior to firing thereof, and producing an electrical signal representative of the motion vibration to activate said laser light source.

2. (Previously presented) The control system of claim 1 wherein said firearm is a handgun.

3. (original) The control system of claim 1 wherein said laser is activated from about 10 seconds to about 30 seconds.

4. (Previously presented) The control system of claim 3 combined with a firearm, the firearm including a chamber for loading a projectile, a barrel for conveying the projectile toward a target, wherein said laser is included in a laser sight adjacent to said barrel for detecting a target.

5. (original) The control system of claim 1 wherein said motion detector is a piezoelectric transducer.

Remarks

The present invention is directed to a substantial improvement in laser sights, in which the sight is activated by detected motion. That is, if a weapon is moved, indicating it will be potentially used, the laser sight will activate. In the absence of motion, the sight will not activate.

The Examiner has cited new prior art for his final rejection, but none of this art discloses the inventive concept, specifically, a laser sight that includes a "motion detector" that will "activate [a] laser [sight]" when "detecting motion vibration indicative of handling of [a] firearm prior to firing".

The Examiner has cited Houde-Walter '086 and Willoughby et al. '309 as anticipating the claims, yet neither discloses a motion activated laser sight. Specifically, each discloses instead a gravity switch (mercury switch) that activates when the weapon is at a particular angle relative to ground. As such the '086 and '309 prior art is similar to the Serraville patent cited in the previous office action, which is no longer relied upon.

In the '086 and '309 prior art, it is the angle of the weapon, not vibration or movement, that triggers the light. This prior art is thus distinct from the claims at least in that the prior art fails to disclose activating the light source on "motion vibration indicative of handling of said firearm prior to firing thereof".

The Examiner seems to believe that a "gravity switch" is a motion detector. This is not accurate. A gravity switch responds to gravity whether there is motion or not. A motion detector responds to motion, regardless of the direction of gravity. The two have completely different responses and effects.

Motion detection can turn on the light source even when the weapon is not horizontal, such as when it is being held sideways or upside down. It thus has a substantial advantage in circumstances where a weapon is not being held in the conventional, horizontal attitude. And, motion detection can turn off the light source if it is not moving, even if it is being held horizontally, thus saving power if the weapon is left unused in a horizontal position.

The Examiner has proposed, in an obviousness rejection, to substitute a motion sensor from other prior art, for the gravity switch disclosed in the '086 or '309 prior art. This is not proper as it would drastically alter the intended function of the primary reference. The '086 and '309 prior art intends the light source to be "on" when the weapon is within a chosen angle of horizontal. It would be contrary to this purpose for the sight to be "off" when the weapon is in this position, as would occur in the absence of motion under the present claims. Similarly, the prior art intends the light source to be "off" when the weapon is not horizontal, and it would be contrary to this purpose for the sight to not behave this way.

In view of the foregoing, Applicant submits that the claims as presented patentably distinguish each of the references cited by the Examiner, and respectfully requests early issuance of a Notice of Allowability.

If an extension of time is necessary to accompany this communication, please consider this paper a petition for such an extension of time, and apply the appropriate extension of time fee to Deposit Account 23-3000. If any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

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